

Abstract

An apparatus for measuring vision characteristics of an eye includes a laser for providing an optical beam and a focusing element for focusing the optical beam behind a retina of the eye for providing a finite source of secondary radiation on the retina of the eye. The secondary radiation is emitted from the retina as a reflected wavefront of radiation that passes outward from the eye. A polarizer is placed within a path of the optical beam for transmitting a polarized wavefront therethrough. A wavefront analyzer receives the polarized wavefront for measuring distortions associated therewith.